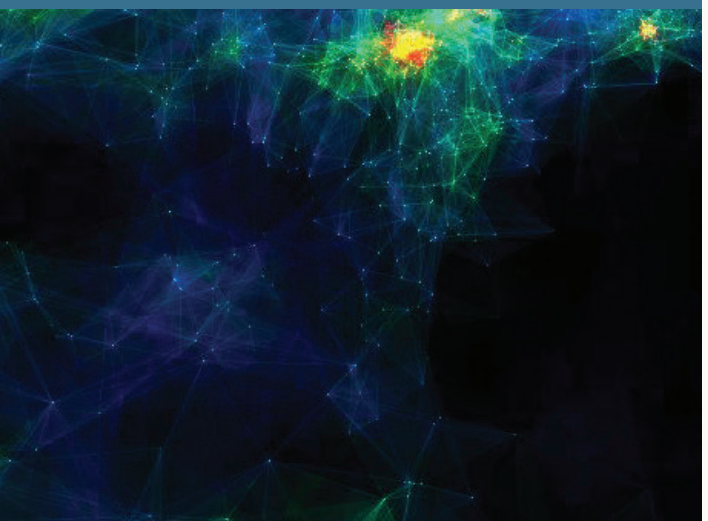
Meeting the Big Data Challenge is not just about building faster computers, it is about **smarter computing**. The Challenge is not to find brute force correlations in Big Data, it is to **identify fundamental relationships**, to expand our understanding of the physical universe. The Challenge is about more than solving today's problems; we want to **set the stage for breakthroughs** we have barely begun to imagine.

At IDIES we develop faster, smarter, better techniques to access and analyze Big Data, enabling the global scientific community to find Big Answers to Big Questions.

Be part of the team that makes it happen. With your help, we will meet **and master** the Big Data Challenge.



The Institute for Data Intensive Engineering and Science
The Johns Hopkins University
3400 N. Charles Street
Baltimore, MD 21218

Want to know more?

Contact us:

idies-team@jhu.edu

http://idies.jhu.edu/future/

JOHNS HOPKINS UNIVERSITY

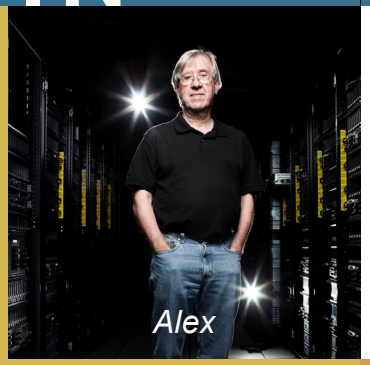
LEADING THE BIG DATA REVOLUTION OF SCIENCE

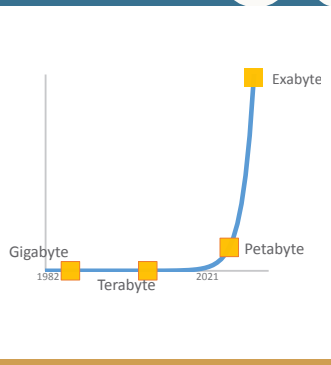
idies

The Institute for Data Intensive Engineering and Science

JOIN OUR TEAM

Alex Szalay, founder of IDIES, began in the mid 1990's with a grant from the Seaver Foundation, followed by grants from the Moore and Keck Foundations. Alex leveraged the seed money, hiring postdocs and researchers to realize his vision of a scientific big data revolution.



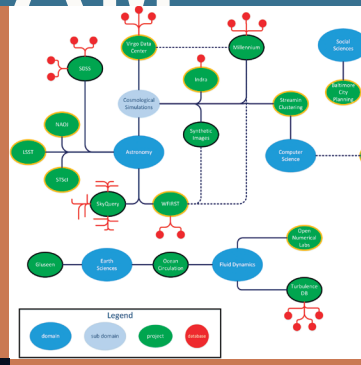


2001: SDSS releases 100 Gigabytes in its first Early Data Release.

2012: SDSS releases 10 Terabytes in Data Release 12.

2021: LSST is projected to release 1.5 Petabytes per year.

Mastering scientific big data is about recruiting and training the world's best scientific revolutionaries and giving them the resources they need to do the job.



MEET THE TEAM

Professor Andrew Connolly of the Univ. of Washington, once a post-doc working with Alex Szalay, now shapes the scientific future of the LSST (Large Synoptic Survey Telescope).

The Sloan Digital Sky Survey (SDSS) has created the most detailed three-dimensional maps of the Universe ever made, with deep multi-color images of one third of the sky, and spectra for more than three million astronomical objects.

$25K: Named seed fund for innovative research.

$50K: Named research fund for novel data analysis hardware.

LEARN THE SCIENCE

The Institute for Data Intensive Engineering and Science (IDIES) fosters research in data-intensive science, with emphasis on problems of national interest in science and engineering.

SciServer

SciServer is an ambitious cyberinfrastructure project funded by the NSF to enable universal access to and analysis of large scientific datasets.

$10K: Named graduate student research stipend.

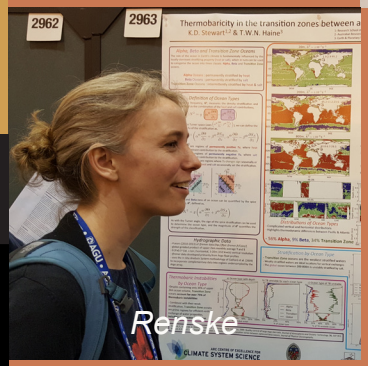
$50K: Named support for a graduate student for one year.

ΠthD

Alex Szalay is working to reinvent the PhD at Johns Hopkins with a "PI" shaped training format – deep training in two disciplines (i.e. biochemistry and computer science).

IDIES researchers are working with the Large Synoptic Survey Telescope (LSST) to optimize database storage and access so that researchers around the world can access its expected 15 Petabytes of catalog data.

LSST
Large Synoptic Survey Telescope



$50K: Named research award for a post-doc for six months.

$100K: Named research award for a post-doc for one year.

$200K: Named research award for a post-doc for two years.

CONTRIBUTE